

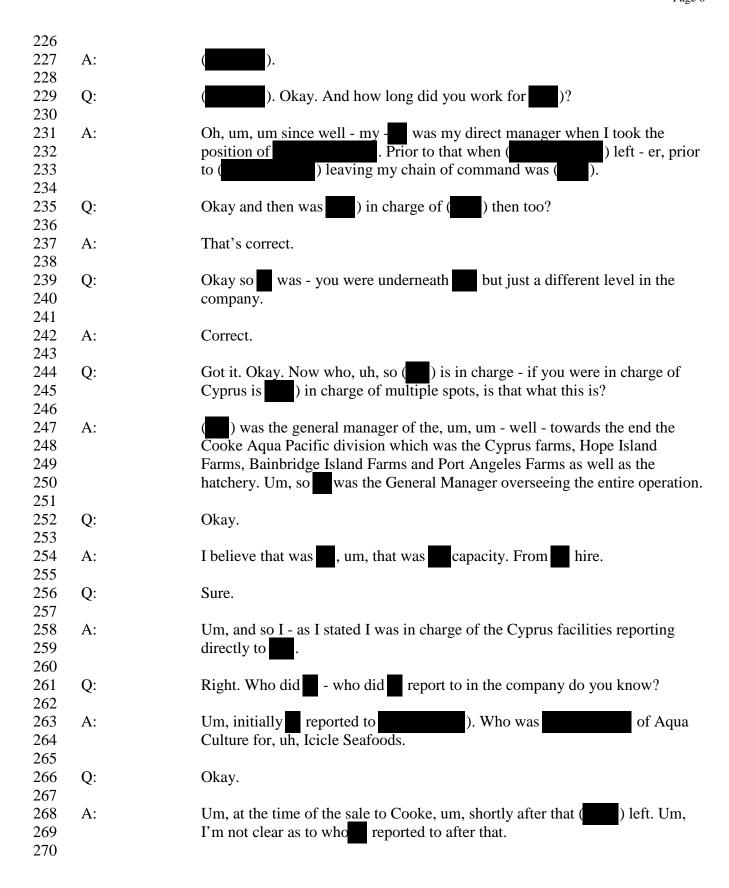
46		
47	Q:	Okay. And then, uh, it's my understanding that you used to work for Cooke
48		Aquaculture, is that correct?
49		
50	A:	That's correct.
51		
52	Q:	Did you start off with them or were you part of the system when they were
53		also, um, American Gold Seafoods and
54		
55	A:	I was part of the system prior to Cooke Aqua's ownership.
56		
57	Q:	Okay can - let's go back and talk about that. Let's start off with that. When
58		did you start?
59		
60	A:	Um, I started in
61		
62	Q:	Who owned the net as of that point?
63		-
64	A:	At that point it was, uh, under the name American Gold Seafoods and owned
65		by Icicle Seafoods.
66		<u></u>
67	Q:	Okay. Did you used to - did you know (
68		
69	A:	I knew of (
70		
71	Q:	Okay. Okay yeah. I think was a partner in - not that this is relevant at all
72		but - just that I remember that American Gold Seafoods was
73		baby
74		
75	A:	Yeah it was.
76		
77	Q:	Yup. For a while.
78		
79	A:	For a while.
80		
81	Q:	Um, so then you were part of AGS and then you went over to Icicle when they
82		kinda started running the show.
83		
84	A:	I believe that - that sale had just happened or was finalizing when I started.
85		
86	Q:	When you started okay. Then eventually it transitioned into Cooke in like
87		2016, is that right?
88		
89	A:	Um, that is correct yes.
90		

91 92	Q:	Okay, so then, um, what- what- what did you start off as - with them?
93	A:	Um, uh, beginning I was entry level.
94	_	
95	Q:	Okay.
96		
97	A:	Um, so I had no experience in fish farming per say, at that time. Um, I began
98		as a quote un-quote walk way worker. Um, so I was being trained, uh, from
99		the ground up.
100	0	
101	Q:	Okay.
102	Α.	Total deline beside a manufler laboration for discourse the desire and
103	A:	Just doing basic generally labor, um, tending, feeding, uh, regular duties on
104		the farm.
105	0.	Of the Atlantic Salmon?
106 107	Q:	Of the Adamic Samon?
107	A:	Of the fish correct.
109	Λ.	Of the fish correct.
110	Q:	Right okay. Was it always Atlantic Salmon out there?
111	Q.	right okay. Was it always retained sufficiency.
112	A:	It was yup.
113	11.	it was yap.
114	Q:	Okay. Uh, before I continue on that part. Uh, can you give me your
115		educational background just while we're at it.
116		
117	A:	Um, I, uh, graduated Highschool. Highschool diploma. I went for, uh, three
118		years of college in and then left there, uh, to make my way
119		up here.
120		
121	Q:	Got it. Okay. And then let's go back to your employment. Then you started
122		off as a walk - walk way worker is that right?
123		
124	A:	Correct. Entry level no - no experience.
125	_	
126	Q:	Sure and then, uh, moved up to the next position. What was your next position
127		there?
128		
129	A:	Um, my next position was, um, site supervisor.
130	0.	Observations for a site is that the sub-the su
131	Q:	Okay now for a site is that the, uh, the entire net-pen or is that a section of or -
<ul><li>132</li><li>133</li></ul>		how's it work, can you explain that to me?
133	A:	So if you're familiar with Cyprus
125	A.	50 II you ie ianimai with Cypius

135

136	Q:	Yes.
137		
138	A:	in particular there are three rafts we call them
139		•
140	Q:	Yup.
141		•
142	A:	it's like site one, site two, and site three.
143		
144	Q:	Okay.
145		·
146	A:	So all three sites are considered The Cyprus Facility. However they are
147		broken into site one, site two, the one in question, and site three.
148		, , , , , , , , , , , , , , , , , , , ,
149	Q:	Okay got it. So at that point where - which one were you in charge of?
150		
151	A:	I was site two raft supervisor.
152		•
153	Q:	Raft supervisor okay and how long were you in that position?
154		
155	A:	Um, approximately a year.
156		, are the second of the second
157	Q:	Okay.
158		
159	A:	Maybe.
160		
161	Q:	And then where did you go?
162		<i>y 8</i>
163	A:	From that point I went to Fish Health Tech. Uh, so that, uh, that included
164		some, um, included some outside training by some fish veterinarians that had
165		been working with the company. Uh, and what not, uh, my - my duties in that
166		roll were monitoring fish health taking regular tissue samples, um, checking
167		behavior etcetera. Uh, coordinating - coordinating with, uh, departments and
168		agencies and at least submitting my - my, uh, field reports.
169		,,,
170	Q:	Right.
171	٧.	rugiii.
172	A:	From what I found. To either - up my chain of command.
173	11.	Trom what I found. To ethici - up my cham of command.
174	Q:	Was that for all of - all of just Cyprus or was that for the entire Cooke
175	Q.	operation here.
176		operation here.
177	A:	Just Cyprus.
178	<i>1</i> 1.	Just Cyptus.
179	0.	Just Cyprus. So you were - each- each site or not site but each like Cyprus it's
180	Q:	self has the three sites and it has, uh, site supervisor on each?

404		
181		
182	A:	That's correct.
183		
184	Q:	And then you were overseeing the three nets as the health person?
185		
186	A:	That's correct.
187	11.	That 5 correct.
188	0.	For the fish. Right okay. And is there any other positions besides those three -
	Q:	
189		four there?
190		
191	A:	Um, uh, prior to raft supervisor I was trained as a diver.
192		
193	Q:	Okay.
194		
195	A:	Um, the company paid for all that training, uh, just open water certs and then I
196		got some advanced certs, uh, deep water diving, limited visibility etcetera.
197		Um, uh, so a lot of my job entailed diving early on that was - that
198		corresponded with the raft supervisor. So while doing raft supervisor duties I
199		was also a diver, um, responsible for those - those tasks. Uh, fish health - as I
		<u> •</u>
200		moved into fish health, um, my diving duties decreased a little bit.
201		
202	Q:	Sure.
203		
204	A:	And, um, after fish health I, um, let's see after the fish health training I was
205		promoted to the job of assistant manager. Um, of the facility itself so all three
206		facilities.
207		
208	Q:	Yup.
209		1
210	A:	That was under ( was the facility manager and I worked,
211	11.	as, a, assistant manager for for two - two plus years or so. Until , uh,
212		left the company. At that point, um, I guess I was next in line. I was promoted
213		to, uh, facility manager.
214		
215	Q:	Which means were in charge of all three - overseeing all three of the - as
216		in Cyprus.
217		
218	A:	That's correct.
219		
220	Q:	Got it okay.
221	-	•
222	A:	And at that point, uh, that was my current role until my departure.
223	- <del></del>	point, on, and mas my content to to their my departure.
224	Q:	Sure. Let's, uh, who was your supervisor - you said ( ) until you
225	₹.	were promoted. Who was your supervisor once you were promoted?
443		were promoted. Who was your supervisor once you were promoted?



271	Q:	That's okay. Is (
272 273	A:	No lis not.
274 275	Q:	Different
<ul><li>276</li><li>277</li><li>278</li></ul>	A:	Different yes.
279 280 281	Q:	Oh, okay got it. All right so you were there for - as the long roughly?
282 283 284	A:	Um, let's see I believe it was, um, I'm not exact on my dates but I believe it was, uh, in the area around August in 2015 - it was fall 2015 I believe when
285 286	Q:	Sure. That's close enough.
287 288 289	A:	when um, when, um, ( ) left. I took over. Uh, officially shortly after that, um, and, uh, was there uh, until my departure.
290 291	Q:	When did you leave?
292 293	A:	Um, my - I left in October of 2017.
294 295	Q:	Okay, so after
296 297	A:	No I'm sorry, I'm sorry - restate that. The end of November 2017.
298 299	Q:	After the accident - the second accident obviously.
300 301	A:	That's correct.
302 303 304 305	Q:	All right. So, uh, you were the during the entire time frame when we were having the - when the net-pens were having- when that net-pen was having trouble.
306 307	A:	I was the . Uh, through the entire time yes.
308 309 310 311	Q:	Okay got it. Uh, so let's get into the discussion of - of the net-pen itself. How old were these net pens roughly? The structure not the nets themselves I know those change in age all the time because they are being changed out but the structure itself do you have any idea how old they were?
312 313	A:	Um, I have a very vague idea.
314 315	Q:	Okay.

316		
317	A:	I know that site three was the newest site. Um, it was approximately six years
318	11.	old.
319		010.
320	Q:	Okay.
321	Q.	Okay.
321	۸.	Thelieve was site two and site and want of similar and Theli I sould smeak to
	A:	I believe, um, site two and site one were of similar age. I beli- I can't speak to
323		an exact date.
324		
325	Q:	Okay.
326		
327	A:	But I know that they were, a, considerably older than site three.
328	_	
329	Q:	All right, ah, can you give a description of how would you describe the
330		condition of the structure during the time frames you were working on?
331		
332	A:	Um, site one and site two, uh, were - were in a, uh, state of, um, they were
333		definitely toward the end of their life.
334		
335	Q:	Okay.
336		
337	A:	Walkway conditions were rusty, um, we were using materials to patch holes in
338		the walkways, um, uh, there had been some reinforcement done to some of the
339		walkways where, uh, cracks and deterioration had been noticed. Um, so they
340		were - they were in a stare of repair.
341		······································
342	Q:	Okay. Now I know that they were scheduled to be - or that number - let's
343	₹.	concentrate on number two but number two is scheduled to be excised or
344		taken out of the system in the coming year at some point correct.
345		taken out of the system in the coming year at some point correct.
346	A:	That's correct.
347	11.	That 5 correct.
348	Q:	Um, when did you, uh, start noticing, or if you did, cracks in the system. In
349	Q.	the structure of number two?
350		the structure of number two:
351	۸.	IIm I can't I can't smalk to an avect data
	A:	Um, I can't - I can't speak to an exact date.
352	0.	No that's fine.
353	Q:	No that 8 fine.
354 355	۸.	Maticing those I do Irrovy that during per tagung as
355	A:	Noticing those I do know that during my tenure as while
356		) was in charge, um, there were some cracks noticed in the exterior
357		walkways of site two. And, uh, some repair work was done. Um, uh, without a
358		lot of details some strapping was put in.
359		
360	Q:	Right.

261		
361	Α.	C 1 i i
362	A:	Some x-bracing was put in.
363		
364	Q:	I have a - a - actually I have it out in the truck - I'll go get it here in a minuet,
365		but I have some pictures we can talk about. So I know in 2015 the cross
366		bracing was put in as I've interviewed the who did the welding on that.
367		
368	A:	Okay.
369		
370	Q:	Um, and said that was to alleviate stress cracking and things like that. Do
371		you feel that that worked?
372		,
373	A:	Um, for a period of time.
374	11.	on, for a period of time.
375	Q:	For a period of time.
376	Q.	Tot a period of time.
377	A:	It appeared to year
378	Α.	It appeared to yes.
	0.	And then so I know these were done in 2015 and I'm not soing to him down
379	Q:	And then so I know those were done in 2015 and I'm not going to pin down
380		on what exact date because I don't remember myself but in 2015 that bracing
381		was done and then it - how long a period of time do you think that that worked
382		before things started going bad again?
383		
384	A:	Um, that appeared to, um, be structurally sound until the event.
385		
386	Q:	Until the event.
387		
388	A:	To the best of my knowledge.
389		
390	Q:	Okay all right. So then, uh, uh - let's get into talking about the structure or the
391		nets themselves. There is obviously, you know, in in estimate of 305,000 fish
392		roughly inside those things at the time of the incident. Um, how are you
393		cleaning those nets?
394		č
395	A:	Um, there were several different methods of net cleaning. Um, uh, our main
396	•	method was in Situ net washer. Uh, meaning the nets replace or remained in
397		place hanging in the cages with the fish inside them. Uh, the net cleaning
398		machines themselves were of a couple different varieties but with the same,
399		uh, basic idea. It was a high pressure jetted water system so there was a pump
400		and a powerpack that was stationary, uh, on the system, ah, and it was fed
401		through a hose to a wash head. We had a five-disk unit. Which means five
401		high pressure disks spinning.
402		ingh pressure disks spinning.
403 404	0.	That's the MPI correct?
	Q:	That 8 the MFT correct!
405		

406	A:	The MPI that's correct.
407		
408	Q:	Right.
409		
410	A:	Um, so that was our main method.
411		- <b>,</b>
412	Q:	Okay.
413	Q.	Okuy.
414	A:	Uh, that was manually or with the assistance of a winch lowered and raised
415	A.	•
		along the net walls. Uh, we also had a smaller unit of the same sort of design
416		that was an (Edema) washer. Um, that an Aqua (Edema) washer it had, uh, uh,
417		like I said same basic design, but it had, uh, twin disk head so just a smaller
418		path.
419		
420	Q:	Okay.
421		
422	A:	Um, we also had for some time a Stingray cleaning unit which was a
423		hydraulic - a hydraulic disk head so instead of high pressure jetting it was an
424		actual, um, for lack of a better term they were wheels with knuckles on them
425		that actually agitated growth and debris off of the net itself.
426		that actually agraced grown and acoms on or the net resent.
427	Q:	Let's talk about each one of those in order as you describe them here.
428	Q.	Let's talk about each one of those in order as you describe them here.
	۸.	Olsan
429	A:	Okay.
430		
431	Q:	The MPI has the five heads uh how effective in your opinion was that on
432		cleaning?
433		
434	A:	Uh, it was quite effective.
435		
436	Q:	Quite effective. Okay.
437		
438	A:	When, uh, operational quite effective.
439		
440	Q:	Right. We'll get into the operational part of it. So let's just talk about a couple
441	Q.	of things that grow on there. Obviously, there was seaweed.
442		of things that grow on there. Obviously, there was seaweed.
443	A:	Mm-hm.
	A.	IVIIII-IIIII.
444	0	
445	Q:	There's shrimp - I can't think of the name of what they call that.
446		
447	A:	Oh, um, hydroids.
448		
449	Q:	Yeah.
450		

451	A:	They are hydroids.
452		
453	Q:	Yeah exactly. And then there is mussels.
454		
455	A:	Mussels of course.
456		
457	Q:	Obviously. How does the MPI do against all of that stuff? Is it pretty good or
458		does it have good stuff and bad stuff? How does it work?
459		
460	A:	Um, the - the MPI worked great on probably 90 percent of biofouling.
461		
462	Q:	Okay.
463		•
464	A:	Um, muscles included when the mussels were small it was quite effective on
465		it. If - once mussels begin to set, um, and they were large thick sets of them.
466		
467	Q:	Right.
468		č
469	A:	It - its effectiveness decreased.
470		
471	Q:	Okay. How - let's say you said like 90 percent - it can handle 90 percent of
472		that stuff. If it was, uh, large amounts of large mussels what's - what would
473		you say its effectiveness is on that?
474		y •
475	A:	Um.
476		
477	Q:	I know you're not a scientist just a thought about
478		
479	A:	Right, um, all I can say to that is when we did encounter areas of uh, of - of
480		progressed growth. Large mussel sets, um, it would take multiple passes or
481		take more time to clean that net.
482		
483	Q:	Okay.
484		
485	A:	So instead of allowing for one pass and it being and it um being clean -
486		deemed clean
487		
488	Q:	Right.
489	•	6
490	A:	it would, uh, the net cleaning itself would take longer and may mean
491	•	multiple passes however each pass - each pass, um, each pass, resulted in, uh,
492		decreasing the amount of fouling so as you make multiple passes it
493		
494	Q:	Got it.
495		

496	A:	would kind of chew through it.
497		_
498	Q:	Okay. Let's talk about the edema itself how did that do?
499		·
500	A:	The (Edema) was similar to the MPI, uh, in effectiveness and operation with
501		the exception of the fact that it had, uh, a smaller
502		the exception of the fact that it had, an, a smaller
503	Q:	Path.
504	Q.	i uui.
505	A:	Footprint or path.
506	A.	Pootprint of paul.
	0.	Dight Dight alvay Hays did the atingger de 9
507	Q:	Right. Right okay. How did the stingray do?
508		
509	A:	Uh, the stingray was very effective. Uh, especially on heavy growth. Like
510		mussels. It was our go-to.
511	_	
512	Q:	Yeah, I saw it. It looks like it has almost blades on it.
513		
514	A:	Exactly yeah. Um, it was effective in that it was actual, uh, mechanical
515		disturbance of the muscles.
516		
517	Q:	Right. Okay.
518		
519	A:	Um, up and - and extreme fouling like that so it was, quite effective.
520		
521	Q:	Um, on a - I don't know a lot about net-pens but obviously on a net-pen
522		you're going to have an inside and an outside.
523		, , ,
524	A:	Mm-hm.
525		
526	Q:	And then you're going to have your predator net out there as well to keep -
527	₹.	and that surrounds the entire contraption, right?
528		and that barrounds the entire contraption, right.
529	A:	That's correct.
530	11.	That 5 correct.
531	0.	Does the MPI or any of the cleaners go on both sides of the pred net - excuse
532	Q:	me the - the fishing net itself?
		me the - the fishing het itself?
533	۸.	I The compared by mo
534	A:	Uh, generally no.
535	0	
536	Q:	No okay so it - it only goes on one side. Which side does it go on? The side of
537		the fish or the side of the outside?
538		
539	A:	The inside. The side with the fish.
540		

541	Q:	Inside with the fish okay.
542		
543	A:	Correct.
544		
545	Q:	Now when you, uh, are running that machine and it goes down on the inside
546	ζ.	of the net is it also taking care of stuff that's on the outside of the net?
547		of the net is it also taking care of staff that is on the outside of the net.
548	A:	Uh, to a degree.
549	Α.	on, to a degree.
550	0.	Okay. But a limited degree?
	Q:	Okay. But a fifficed degree?
551	<b>A</b>	
552	A:	Uh, uh, a limited degree.
553		
554	Q:	Okay so if you had - let's say you had a large square that had a lot of muscles
555		in that square some inside some outside. It will clean the inside obviously will
556		it clean some of the outside or?
557		
558	A:	It would clean some of the outside.
559		
560	Q:	But not 100 percent.
561		
562	A:	It would vary depending on the - the growth.
563		
564	Q:	Right is there a way to get the MPI and or any of these machines between to
565	•	do the outside of the net?
566		
567	A:	Um, it would be possible.
568	71.	oni, it would be possible.
569	Q:	Okay. Was it done?
570	Q.	Okay. Was it dolle:
571	A:	It was not done.
	Α.	it was not done.
572	0.	Olsay so only the incide is being done dyning elegning?
573	Q:	Okay so only the inside is being done during cleaning?
574 575	<b>A</b>	
575	A:	That's correct.
576		
577 570	Q:	Okay now you have also on the outside the predator net. Which goes down
578		and goes around and just completely seals it off from large animals getting in,
579		correct?
580		
581	A:	That's correct.
582		
583	Q:	Uh, was that ever, uh, used with the - was the MPI or any of these ever used
584		on the predator net itself?
585		

586	A:	Yes.
587		
588	Q:	Okay. Was it inside?
589		
590	A:	Outside.
591		
592	Q:	Only on the outside.
593	•	,
594	A:	Correct.
595	11.	
596	Q:	Okay. Uh, and the inside - same kinda deal?
597	Q.	Okay. On, and the miside - same kinda dear:
	Δ.	The incide would be considerably more difficult to the total duese then even
598	A:	The inside would be considerably more difficult to try to address than even
599		the outside of the fish pens.
600		
601	Q:	Got it.
602		
603	A:	Which they would both be an extremely difficult.
604		
605	Q:	Because they are both together there basically or close to each other.
606		
607	A:	They are together on the perimeter but even on the interior on the walkways,
608		uh, there's is rigging. The walkways themselves do not allow for a gap it
609		would be, uh, a very difficult operation.
610		
611	Q:	Sure, when you, ah, clean the inside of the fish pen and the outside of the
612	•	predator net do you still see material between the two. You know um -
613		biofouling between the two? You know, like on the inside of both there's -
614		where you cannot - you're not cleaning there is going to be material - were
615		you ever able to get that off of there?
616		you ever able to get that off of there:
	Δ.	The historian off of the material?
617	A:	The biofouling, off of the material?
618	0	<b>3</b> 7
619	Q:	Yes.
620		
621	A:	Um, um, again depending on the fowling.
622		
623	Q:	Right.
624		
625	A:	Depending on the fowling the effectiveness of the washer would clean the
626		outside of the cage - the outside of the cages. Um, and - and thought through
627		routine cleaning you could eliminate some fowling on the outside yes.
628		
629	Q:	Okay. So, uh, when you did the - the cleaning itself you do, uh, obviously you
630	-	have four walls in a rectangular shape in each pen and then you have the
-		C I I I I I I I I I I I I I I I I I I I

631		outside and then you have a bottom. You don't have a top obviously, but you
632		have a bottom, correct?
633		
634	A:	Correct.
635		
636	Q:	Does the bottom get done as well.
637		
638	A:	Um, we address the bottom, uh, as best we could.
639		
640	Q:	Okay, could you give me more?
641		
642	A:	Yes. So - so, uh, generally the best way to address the bottom, um, would be
643		with divers - actual divers down there with actual pressure washers. So
644		pressure washer wand and divers going across the bottom. Um
645		
646	Q:	On the inside with the fish?
647	<del>۷</del> ٠	on the morae with the right.
648	A:	On the inside of the net with the fish. Um, if you can picture using a pressure
649	11.	washer wand and just cleaning it. Um, that was, uh, time consuming.
650		washer wand and just cleaning it. Oil, that was, an, time consuming.
651	0.	Sure.
	Q:	Suite.
652	۸.	I show intensive of source I by those years mathods to address the flears with
653	A:	Labor intensive of course. Um, there were methods to address the floors with
654		the MPI, Stingray, and Edema units.
655	0	
656	Q:	Sure.
657		
658	A:	Uh, that was well was a slow process and time consuming. It involved
659		actually raising one side of the net itself and, uh, allowing the MPI or (Edema)
660		head to run down the floor or physically sending the head to the bottom and
661		having a diver pull it across the bottom.
662		
663	Q:	Okay so you're in charge of - of the net pen for a couple of years there. In that
664		time frame how often do you think that the bottom of that net was cleaned?
665		
666	A:	Um, I don't recall how often the bottom of that net was cleaned. Our main
667		focus was the walls.
668		
669	Q:	Right. So it - give me a guess - let's say a year or six months - how often
670		within that time frame?
671		
672	A:	Um, in a six-month time frame, uh, let me state this.
673	11.	on, in a six month time frame, an, let me state this.
674	Q:	Sure.
675	<b>√</b> ·	Duic.
013		

676	A:	So when we received our fish they were stocked into small pens.
677		
678	Q:	Yeah.
679		
680	A:	Which is a different net itself. Smaller mesh.
681		
682	Q:	Of course.
683		
684	A:	Um, after, um, after a certain amount of time once the fish were large enough
685		that there was no, um, no risk of - of escapement through the larger meshes,
686		um, we would swap the nets with a grow out net.
687		5,
688	Q:	Okay.
689	Ψ.	Chuj.
690	A:	Kay. Larger mesh more flow.
691	11.	Ruy. Darger mesh more now.
692	Q:	Right.
693	Q.	right.
694	A:	That allowed us to start after about after a six or eight month approximately
695	Λ.	period that allowed us to start with another clean net.
696		period that anowed us to start with another clean net.
	0.	Sura
697 698	Q:	Sure.
699	A:	At that point up walls were the main fears why floors were hit on a case by
	A.	At that point, um, walls were the main focus, uh, floors were hit on a case by
700		case basis.
701	0.	Olere Carrier and an arrange of the second state of the second sta
702	Q:	Okay. So on net-pen number two. Your new fish your schmaltz came in
703		roughly the middle of 2016, right?
704	<b>A</b>	
705	A:	That correct.
706		
707	Q:	Okay. So the nets got changed out for them obviously. Shortly their after
708		because they're getting big. You got to move those - to get more flow you got
709		to get a bigger net.
710		
711	A:	More flow. The nets themselves are deeper so there is more volume.
712		
713	Q:	Exactly 'cause they are going to get - fish are going to get bigger and there is
714		bigger space that way. I get that.
715		
716	A:	Correct.
717		
718	Q:	Uh, so the nets are changed out in 2016, right?
719		
720	A:	That's correct.

721		
722	Q:	So you have. Let's say roughly a year between, uh, uh, the nets being changed
723		out and the incident in August. How often do you estimate that floor was done
724		at that time?
725		
726	A:	Um, I can't say that all the floors were done completely. Uh, at any time.
727		
728	Q:	Okay.
729	•	y.
730	A:	I know that we were addressing issues as they arose as well as addressing
731		other sites.
732		<b>0</b>
733	Q:	Sure.
734	ζ.	
735	A:	Uh, that had other issues.
736	11.	on, that had other issues.
737	Q:	No I understand that part. Okay well we've come back to that, uh, let's talk
738	Q.	about the equipment themselves - the three pieces of machinery now you said
739		earlier that - they worked and were effective if they were working.
740		currer that they worked and were effective it they were working.
741	A:	Correct.
742	11.	Contect.
743	Q:	Can you give me some description of what you're talking about on that?
744	Q.	can you give me some description of what you to taking about on that.
745	A:	Um, we had mechanical issues. Um, through the Summer of 2017. Um,
746	11.	spring. Uh, early spring and through the summer. Uh, I know one of our - one
747		of our MPI units was down for, um, a bit of time. Um, I don't recall exactly
748		but a substantial amount of time. That unit was shipped down to Seattle for
749		repairs and was gone for quite a while. Um, we received an Edema unit, uh,
750		that had some minor mechanical issues. That kept it - that it was kinda hit and
751		miss.
752		iniss.
753	Q:	Right.
754	ζ.	right.
755	A:	When it was running. Um, when it was running as well as the Stingray, uh,
756	11.	was functional for the majority of the time. Uh, some minor issues that would
757		cause it to be down for a few days or a week at a time. But for the most part
758		we could get that back up and running.
759		we could get that back up and running.
760	Q:	Okay so, uh, how - how long - let go - let's do this - how many cleaners do
761	Q.	you have for the Cyprus system?
762		journation the Oppide official.
763	A:	Um.
764		
765	Q:	While you were there anyway.
	~	

766		
767	A:	While I was there we had, um, we had one - we had two MPI units for a
768		period of time. Uh, the (Edema) came in after the fact. After one of our MPI
769		units went down
770		
771	Q:	Okay.
772		
773	A:	I believe, um, and the Stingray we had - we had the one Stingray. And we
774		had that for several years.
775	_	
776	Q:	Okay so the - e- there was equipment assigned just to the Cyprus. So pardon
777		me - the three net pens themselves were being cleaned by the same equipment
778		it's not one MPI and one Stingray at net-pen two?
779		
780	A:	No that's correct.
781	0.	The second that and a Common section
782	Q:	They cover that entire Cyprus system.
783 784	A:	That's correct.
785	A.	That's correct.
786	Q:	Uh, was there ever a time when you had to lend those out to other areas?
787	Q.	on, was there ever a time when you had to lend those out to other areas?
788	A:	Uh, there was a time. Uh, when they were shared.
789	11.	on, there was a time. On, when they were shared.
790	Q:	Okay and that was shared between how many, uh, net-pen systems?
791	•	
792	A:	Um, it was shared between all the all the marine farms.
793		
794	Q:	So.
795		
796	A:	So for instance if they needed one - there was an emergency somewhere else
797		and they needed one
798		
799	Q:	Sure.
800		
801	A:	and we had one or it was deemed we were well enough ahead that one
802		maybe taken and shipped over to another location.
803	0	
804	Q:	How many other marine farms are their like Cyprus? In the system here.
805	۸.	Um wall there is Dort Angeles um its two refts. I believe amortimet 1-26
806	A:	Um, well there is Port Angeles, um, its two rafts. I believe approximately 26
807 808		cages I forget.
808 809	Q:	Okay.
810	ų.	Oray.
010		

811 812 813 814 815	A:	Um, Hope Island which is a one raft system of ten cages. And then Bainbridge Island had two systems, no - Bainbridge Island had multiple systems under the Bainbridge Island umbrella. Which was Clam Bay and Orchard Rocks for Orchard Rocks.
816 817	Q:	For Orchard?
818 819	A:	For Orchard Rock.
820 821 822	Q:	Oh Orchard Rocks. Oh okay I know where it's at - For Clam Bay. Those are both under Bainbridge I got ya. So there is four total with Cyprus.
823 824	A:	Four total marine sites yes.
825 826	Q:	Okay.
827 828	A:	Cyprus included.
829 830 831	Q:	And sometimes you'd have to share that equipment with other sites? Was there ever a time where you had to bring equipment for your site?
832 833	A:	Yes.
834 835 836	Q:	There was. And is that because of equipment being down or is that because of growth problems or?
837 838	A:	Either one.
839 840	Q:	It could be either one.
841 842	A:	Yup.
843 844 845 846	Q:	Okay. All right, uh, when you're - let me ask you - this is more of a technical question but you're out there on the raft and your looking around how do you know that the nets are getting befouled can you see it?
847 848	A:	Um, to a certain degree you can see from the surface. Uh, visual cues.
849 850	Q:	Just to the naked eye.
851 852 853	A:	To the naked eye. I mean, uh, uh, granted, uh, visibility in Puget sound is not the greatest. Of course.
854 855	Q:	Right - right.

056		
856	A:	You can only see so much depending on turbidity and - and what not, um, but
857		you - you there were plenty of indicators, uh, that I guess someone could use
858		to tell if it's getting fowled.
859		
860	Q:	Can you give me some examples?
861		
862	A:	Um, um the growth of kelp. So bull kelp itself usually grows on the surface.
863		Um, grows rapidly in the spring. So there's that. And if you could - if you
864		could see - if you could see mussels setting in from the surface. One could
865		assume that they were setting in below.
866		ygg
867	Q:	Are you familiar with the time frame that it takes a mussel to grow?
868	Q.	The you fulfill with the time frame that it takes a masser to grow:
869	A:	I'm not.
	A.	I III IIOL.
870	0	
871	Q:	Okay. Just wondering if you - in your bio stuff you did stuff like that. Um,
872		how often do you check the nets for bio-growth?
873		
874	A:	Um, the divers, uh, would report back on a routine basis.
875		
876	Q:	Okay.
877		
878	A:	Um, they were divers generally two to three times a week were entering every
879		cage, uh, to check, uh - to check cage by cage. I mean net - to check net
880		integrity.
881		
882	Q:	Sure.
883		
884	A:	Uh, as well as remove dead fish. Check fish behavior and see if there is
885		anything down there.
886		
887	Q:	Okay.
888	Q.	Okuy.
889	A:	So if if they were observing a substantial growth they were reporting that
	A.	So if - if they were observing, a, substantial growth they were reporting that.
890	0.	
891	Q:	Okay all right, um, uh, what's the regularly - regular schedule for the cleaning
892		of a net-pen?
893		
894	A:	Um, there wasn't. There wasn't necessarily a set schedule.
895	_	
896	Q:	Okay.
897		
898	A:	Um, our operating schedule was we would work - we would work - we had 30
899		cages total. Uh, with uh all sites included.
900		

901	Q:	Right.
902 903 904 905 906	A:	We would start on one site wash through those nets. The - the unites would move to the next site. Wash through those and move to the next when we finished the last cage they would return to the beginning.
907 908	Q:	In that time - oh - go ahead.
909 910	A:	So it was - the attempt was just a constant cycle.
911 912 913 914	Q:	Sure in that time frame. Let's say you started on one, went through two, went through three and then headed back to one. Would you have a lot of growth by the time you got back to one?
915 916	A:	Um, that would depend on time of year.
917 918	Q:	Okay let's say summer time.
919 920 921	A:	Summer time it could be a - it could be a good bit of growth. Summer time is when the growth, um, um
921 922 923	Q:	Water's warmer.
924 925	A:	grew the fastest. Water's warmer, uh, longest photo period.
926 927	Q:	Yup.
928 929	A:	Right. So.
930 931 932	Q:	Okay. All right. Um, what is Cooke's policy on cleaning? Is there a schedule they set, how's it work?
933 934 935	A:	Um, I don't recall a set schedule. Um, uh, to the best of my knowledge it was to do whatever you could to keep the nets clean.
936 937	Q:	Okay so I was just you're in charge, handle it kind of thing?
938 939	A:	Do what you can with what you have, yup.
940 941 942	Q:	Okay all right. Did - obviously, I know they had net-pens - excuse me net cleaners. Were those cleaners owned by the company?
942 943 944	A:	Yes.
944	Q:	Okay they are not leased or anything like that?

946		
947	A:	No.
948		
949	Q:	Okay. So on a - on a job like that were you are in charge of all three site pens.
950		
951	A:	Mm-hm.
952		
953	Q:	Uh, uh, who's in charge of doing the cleaning?
954		
955	A:	Um, those - that was given to various crew members.
956		
957	Q:	On each individual site?
958	•	
959	A:	On each individual site.
960	11.	On out many radial site.
961	Q:	Okay.
962	Q.	Okuy.
963	A:	Correct. Uh, the staff itself for Cyprus for instance, um, there were - there was
964	<b>71.</b>	a raft supervisor for each site. The rest of the employees tended to, um, they
965		weren't set employees for one raft.
966		weren i set employees for one fart.
	0.	Oh okov
967 968	Q:	Oh okay.
	۸.	Dry that I mann thay didn't stay on that noft and navon as hone on those
969	A:	By that I mean they didn't stay on that raft and never go here or there.
970	0	C C
971	Q:	Sure.
972		
973	A:	If the task needed 'em here so, um, you know, they would - they would all the
974		duties were shared.
975		
976	Q:	Sure.
977		
978	A:	Um, several individuals, um, most of the crew was trained one way or the
979		other on the net washing units so we had, uh - had a pool of guys.
980		
981	Q:	That knew what they were doing.
982		
983	A:	That knew what they were doing for the most part. Yup.
984		
985	Q:	Got it. Uh, uh, how often would you think that one or multiple of the net
986		cleaners were out of service?
987		
988	A:	Um, frequently. Frequently.
989		
990	Q:	Okay.

991		
992	A:	Um, they were, you know, um, they were they were, um, um, it's a
993		complicated piece of equipment. It required a lot of attention, um, and so there
994		were definitely times when it was running you know below 100 percent
995		effectiveness or was down.
996		
997	Q:	And, uh, let's talk about the time frame in which we know uh some events
998	-	occurred there. Uh, we know a first event happened in July of 2017.
999		
1000	A:	That's correct.
1001		
1002	Q:	Towards the end of the month. And, uh, prior to that time frame going back to
1003	-	let's say January, six months roughly. Uh, how often were they down in that
1004		six months or were they working at all? Were all of them working how - what
1005		was going on?
1006		
1007	A:	Um, there were - there were various mechanical issues in that period. Um, I
1008		cannot state exactly how may were down for how long.
1009		
1010	Q:	Right but there was there was some problems during that time frame?
1011		
1012	A:	Yes.
1013		
1014	Q:	Do you believe that - that the mechanical difficulties that the machines were
1015		having and not having in place caused excessive growth at the time?
1016		
1017	A:	Um, it made keeping up with that growth challenging.
1018		
1019	Q:	Okay. Because you also had to mind the other two pens as well. With the
1020		same equipment.
1021		
1022	A:	Correct.
1023		
1024	Q:	Okay. Do you happen to remember in the month or two before that how many
1025		pieces of equipment you had operating?
1026		
1027	A:	Um, it varied.
1028		
1029	Q:	Okay.
1030		
1031	A:	And by that, I mean - as I stated the Edema washer had some minor issues to
1032		begin with. Uh, those were able to be remedied on site. Um, so then it was
1033		operational again. Um, the Stingray as well has some minor issues those were
1034		able to be remedied on site. Um, and our MPI, had some issues. Uh, one of
1035		them quite major to a point where it had to be shipped to, uh, Seattle.

1026		
1036	0	
1037	Q:	So right, right before July the MPI wasn't even in the net pen area there?
1038		
1039	A:	It was for a period of time.
1040	_	
1041	Q:	Okay.
1042		
1043	A:	But in the lead up to the July incident we were having mechanical issues. And
1044		we were washing them.
1045		
1046	Q:	These mechanical issues are these things you can fix or does somebody else
1047		come in and fix them?
1048		
1049	A:	Um, we would, uh - uh, we would attempt to do everything we could in-
1050		house. Um, uh to the best of our abilities.
1051		
1052	Q:	Sure.
1053	Q.	Buie.
1054	A:	And uh, and if it was not able to be handled, um, we would, um, we would
1055	А.	request them to be repaired - either an outside source or we did have a Marine
1055		Maintenance Manager. Uh, and job was far reaching, uh, for all four
1057		facilities. And it was was, um, was my contact and the contact for the
1058		other farms when we had these issues.
1059	0	
1060	Q:	Excuse me, when you had these issues what was turnaround time in
1061		coming to assist roughly.
1062		
1063	A:	That varied
1064	_	
1065	Q:	Okay.
1066		
1067	A:	depending on what was already dealing with.
1068		
1069	Q:	Was it - would you say that most of the time it was quick. Most of the time it
1070		was average or below average?
1071		
1072	A:	I would say it was as quick as could get to it.
1073		_ · · · · · - · · · - · · · · · · · · ·
1074	Q:	Okay. And what was name?
1075	-	
1076	A:	Um, ( ) - ( )
1077		
1078	Q:	Okay. So let's talk about the July event. So I know toward the end of July - I
1079	•	think it was like the 24 of July. Uh, the net-pen begins to have an issue is that
1080		correct.
1000		

1081		
1082	A:	That is correct.
1083		
1084	Q:	Can you describe for me. Were you actually there?
1085	-	
1086	A:	Um, I responded, uh, within approximately 2 hours of the event.
1087		
1088	Q:	In fact let's wait for a second real quick.
1089		
1090	A:	Okay.
1091		
1092	Q:	We're going to go off record for just a quick second while I grab some
1093		records.
1094		
1095		
1096	*	s been reviewed with the audio recording submitted and it is an accurate
1097	transcription.	
1098	Signed	